APPENDIX A – Marked up copy of claims showing insertions and deletions

1.   (Amended) A method of identification of primary events in seismic data, the method comprising:

sorting the data by frequency wherein at least some non-primary events are separated from primary events, wherein a frequency sorted gather of data results;

attenuating in the frequency-sorted gather amplitudes above a pre-selected base amplitude, wherein attenuated amplitudes result;

applying a coherency filter to the events, wherein coherent events are identified; and

replacing **[with amplitudes from the coherent events]** <u>the </u>attenuated amplitudes in the frequency-sorted gather **<u>with amplitudes </u>** corresponding to the coherent events.

13.   (Amended) A method of identifying primary events in seismic data, the method comprising:

[applying a coherency filter to the seismic data;]

sorting the seismic data according to **[an event characteristic having a tendency to separate primary from non-primary event]** **<u>frequency</u>**; **[and]**

<u>applying a coherency filter to the seismic data; and</u>

selectively attenuating events in the seismic data, wherein the selectively attenuating is dependent upon the **[characteristic]<u> frequency</u>** and [the] coherency of [the] events **<u>identified by the coherency filtering</u>**.

7